C2 13. (Twice Amended) The drug composition of claim 12 wherein said dopaminergic agonist is selected from the group consisting of bromocriptine and piribedil.

C3 15. (Twice Amended) A method for improving the functionality of D1 and D2 dopaminergic receptors associated with neurodegenerative diseases, multi-systemic atrophies or both, comprising administering to a human mammal over a long term period an effective dose of at least two drug components comprising a first component nicotine or a nicotine derivative, and a second component comprising L-DOPA and a dopaminergic agonist.

C4 18. (Twice Amended) The method of claim 15, wherein said D1 and D2 dopaminergic receptors are associated with neurodegenerative diseases.

21. (Twice Amended) The method of claim 15, wherein said dopaminergic agonist is bromocriptine or piribedil.

C5 22. (Twice Amended) The method of claim 15, wherein said drug composition is administered transdermally, subcutaneously, by using an extracorporeal pump, or orally.

C6 24. (Twice Amended) The method of claim 15, wherein said first component is administered at a gradually increasing rate.

C7 26. (Amended) The method of claim 25 wherein, the effective dose of said L-DOPA is at least 30% lower than the effective dose when L-DOPA is administered in the absence of said first component.

C8 28. (Twice Amended) A method for treating a neurodegenerative disease, a multi-systemic atrophy, or both, in a human mammal comprising administering over a long term period an effective dose of at least two drug components comprising as a first component, nicotine or a nicotine derivative, and a second component comprising L-DOPA and a dopaminergic agonist.

31. (Twice Amended) The method of claim 28 wherein said dopaminergic agonist is bromocriptine or piribedil.

32. (Amended) The method of claim 31 wherein said treatment enables multiplication, stimulation and increase of nicotinergic receptors and pre-synaptic and post-synaptic D1 and D2 receptors in the nigrostriatum zone.

33. (Twice Amended) The method of claim 28 wherein said drug composition is administered transdermally, subcutaneously, by using an extracorporeal pump or orally.

C9

34. (Amended) The method of claim 28 wherein at least one of said drug components is in galenical form.

35. (Twice Amended) The method of claim 28 wherein said first component is administered at a gradually increasing rate.

37. (Amended) The method of claim 36 wherein the effective dose of said L-DOPA is at least 30% lower than the effective dose when L-DOPA is administered in the absence of said first component.

C10

39. (Amended) The drug composition of claim 10 or claim 53 wherein said nicotine or said nicotine derivative is present in an amount sufficient to be administered to said subject at a rate of from 93 mg to 160 mg per day.

40. (Amended) The drug composition of claim 10 or claim 53 wherein said nicotine or said nicotine derivative is present in amount sufficient to be administered to a subject at a rate of from 0.2 mg to 5 mg per day per kilogram of body weight of said subject.

C11

41. (Amended) The drug composition of claim 10 or claim 53 wherein said L-DOPA is present in an amount sufficient to be administered to a subject at a rate of 0.2 mg to 3 mg per day per kilogram of body weight of said subject.

C12

44. (Amended) The method of claim 15 wherein said administering is continuous, or progressive.

Please cancel claims 11, 16, 20, 30, 42, 43, 47 and 48 without prejudice or disclaimer of the subject matter contained therein.

Insert new claims 50-55, as follows:

50. (New) The method of claim 28, wherein said administering is continuous or progressive.

51. (New) The method of claim 50, wherein said nicotine or nicotine derivative is administered at a rate of from 93 mg to 160 mg per day.

52. (New) The method of claim 50, wherein said nicotine or nicotine derivative is administered at a rate of 0.2mg to 5mg per day per kg of body weight of said subject, and wherein said L-DOPA is administered at a rate of 0.2 mg to 3 mg per day per kg of body weight of said subject.

53. (New) A drug composition for continuous or progressive or continuous and progressive administration to a subject orally, subcutaneously, transdermally or any combination thereof comprising as a first component, nicotine or a nicotine derivative and a second component comprising L-DOPA and a dopaminergic agonist.

54. (New) The drug composition of claim 53, wherein said dopaminergic agonist is selected from the group consisting of bromocriptine and piribedil.

55. (New) A drug composition for continuous or progressive or continuous and progressive administration to a subject orally, subcutaneously, transdermally or any combination thereof, comprising as a first component, nicotine or a nicotine derivative and a second component comprising L-DOPA in a dose of 0.2 mg to 3 mg per kilogram.